

Twelve new *Hydrochus*-species from South America (Coleoptera : Hydrophilidae)

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Abstract. Twelve new *Hydrochus*-species from South America are described (Coleoptera: Hydrophilidae). From Suriname *Hydrochus choennii*, *H. ramcharani*, *H. battjai*, *H. piroei*, *H. soekhnandanae*, *H. dewnaraini*, *H. rattanae*, from Cayman Brac *H. beeneni*, from Venezuela *H. vanbergehenegouweni*, from Brazil *H. desenderi*, *H. coeneni* and *H. bruggei*.

Samenvatting. Twaalf nieuwe *Hydrochus*-soorten uit Zuid-Amerika (Coleoptera : Hydrophilidae)

Twaalf nieuwe *Hydrochus*-soorten uit Zuid-Amerika worden beschreven: uit Suriname *Hydrochus choennii*, *H. ramcharani*, *H. battjai*, *H. piroei*, *H. soekhnandanae*, *H. dewnaraini*, *H. rattanae*; uit Cayman Brac *H. beeneni*; uit Venezuela *H. vanbergehenegouweni*; uit Brazilië *H. desenderi*, *H. coeneni* en *H. bruggei*.

Résumé. Douze espèces nouvelles d'*Hydrochus* d'Amérique du sud (Coleoptera : Hydrophilidae)

L'auteur décrit douze espèces nouvelles d'*Hydrochus* d'Amérique du sud : de Suriname *Hydrochus choennii*, *H. ramcharani*, *H. battjai*, *H. piroei*, *H. soekhnandanae*, *H. dewnaraini*, *H. rattanae*; de Cayman Brac *H. beeneni*; de Venezuela *H. vanbergehenegouweni*; du Brésil *H. desenderi*, *H. coeneni* et *H. bruggei*.

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Introduction

During a recent collecting trip in the North of Suriname large series of aquatic beetles were collected. They were found in ditches near bushes. These semi-permanent ditches had an abundant aquatic vegetation. The water-beetles were collected in shallow water with a pond net. Among these were several specimens from the genus *Hydrochus* (LEACH, 1817).

The genus *Hydrochus* is distributed more or less worldwide. According to KNISCH (1924) sixteen species have been described from South America. D'ORCHYMONT (1939) presented one new *Hydrochus* species from Argentina. In the collection of D'ORCHIMONT (Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels) types of all South American species are present. The specimens collected in Suriname have been compared with these types. It was proven that these specimens belong to hitherto undescribed species. They will be presented below. When I studied the types from Brussels I recognized three new species. The holotypes will be deposited in the collection of the Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels. Paratypes will be deposited in Natuurhistorisch Museum, Leiden and Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam.

Description of new species

In all new species the membranous wings are fully developed, legs are testaceous, long and slender, maxillary palpi testaceous, scutellum longer than wide, both sexes (if known) are not different from each other. Head

impressed between eyes (except in *dewnaraini* where the medial part of the frons is swollen). Clypeus finely punctate (except in *piroei*, *dewnaraini* and *beeneni* where the punctures are coarse), punctures weakly impressed, interstices smooth and shiny.

Pronotum as wide as long (except in *dewnaraini* where it is wider). Pronotum with densely fine punctures (except in *dewnaraini* where the punctures are coarse). Disc with 5 large deep depressions (except in *battjai* with 7 depressions and in *desenderi* where the depressions are shallow). Anterior margin of pronotum with three depressions, one at the centre, two behind this. Posterior margin with two depressions (except in *battjai* with 4 depressions), its surface closely punctate, the punctures deformed, especially towards the sides.

Male genitalia (when known): apex of median lobe rounded.

All Suriname specimens were captured in semi- or non-permanent ditches. *H. beeneni* was captured in a pool.

Hydrochus choennii nov. spec.

Type: Holotype male. Suriname: District Commewijne 4.viii.1984 (MAKHAN) (female unknown).

Description: (holotype, male) elongate, length 4.4 mm, width 1.6 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra greyish coppery and with a green-blue metallic gloss. Head with densely fine punctures. Elytron length 2.8 mm, widest on posterior third, its surface with fine granules and with short setae, apex with 6 holes, apex rounded. Elytron strongly striate, 5 interstriae on posterior side with a very prominent tubercle, 5 punctures large. 9 interstriae carinate, almost their entire length. Black spots not visible.

Male genitalia (fig. 1): Basal piece same length as parameres, median lobe short.

Etymology: The species is named after my brother-in-law Chandersen CHOENNII.

Hydrochus ramcharani nov. spec.

Type: Holotype male. Suriname Paramaribo 7.viii.1984 (MAKHAN). Paratypes: 15 specimens, same data as holotype (one male 3.8 mm long, rest as holotype).

Description: (Holotype, male) elongate, length 4.0 mm, width 1.5 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra greyish coppery with a blue-green metallic gloss. Elytron length 2.5 mm, widest on posterior third, its surface smooth and with short setae. Apex with holes in two series, upper row 7 holes, lower row 21 holes running to the middle of the elytron. Elytra with more than 10 small black spots. Apex rounded. Elytron strongly striate, 4 and 5 interstriae on posterior side ending with a very prominent tubercle, 6 punctures large, 9 interstriae carinate, almost their entire length.

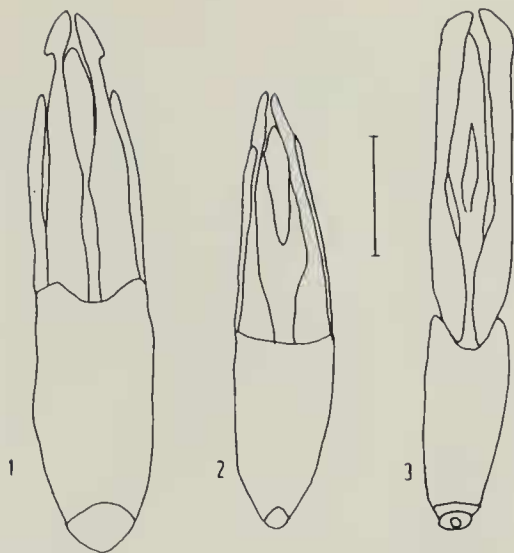


Fig. 1-3: Male genitalia of (1) *Hydrochus choennii* sp. nov., (2) *H. ramcharani* sp. nov. and (3) *H. battjai* sp. nov. (scale line 0.25 mm).

Male genitalia (fig. 2): Basal piece short, parameres longer than median lobe.

Etymology: This species is named after my brother-in-law Prem RAMCHARAN.

***Hydrochus battjai* nov. spec.**

Type: Holotype male. Suriname Paramaribo 7.viii.1984 (MAKHAN).
Paratypes: 3 specimens, same data as holotype.

Description: (Holotype, male), elongate, length 3.5 mm, width 1.3 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra greyish coppery with a green metallic gloss. Head with densely fine punctures. Pronotum: disc with seven large depressions, not deeply impressed. Posterior margin with four depressions. Elytron length 2.2 mm, widened to about half of the way to the apex, its surface with fine granules and with short setae, apex rounded. Elytron strongly striate. 5 interstriae on posterior side with a very prominent tubercle, 6 punctures large, 9 interstriae carinate, almost their entire length. Elytra with more than 10 large black spots. Apex holes absent.

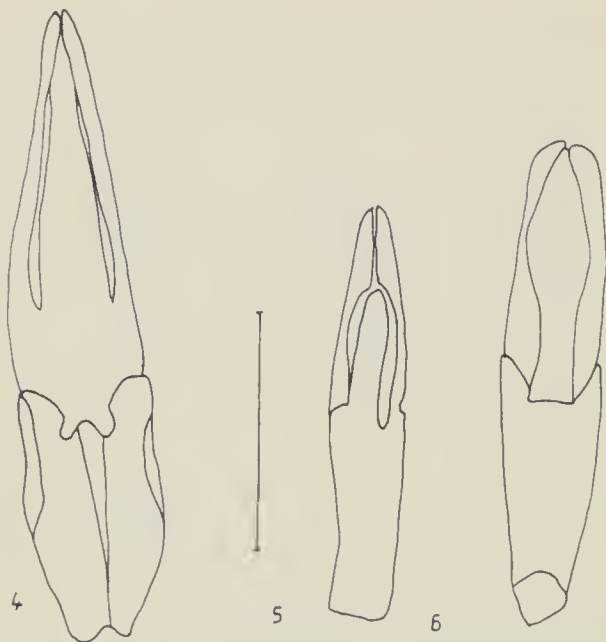
Male genitalia (fig. 3): Basal piece short, parameres very long, median lobe short.

Etymology: This species is named after my nephew Sjaamkumar BATTJA.

Differential diagnosis: This species seems to be allied to *H. variabilis* KNISCH, 1921 from Brazil; *H. variabilis* can be easily distinguished by its shallow tubercle on posterior side of elytron and the absence of black spots.

***Hydrochus piroei* nov. spec.**

Type: Holotype male. Suriname Paramaribo 7.viii.1984 (MAKHAN).
Paratypes: 7 specimens, same data as holotype.



Figs 4-6: Male genitalia of (4) *Hydrochus piroei* sp. nov., (5) *H. soekhnandanae* sp. nov. and (6) *H. rattanae* sp. nov. (scale line 0.25 mm).

Description: (Holotype, male) elongate, length 2.9 mm, width 1.0 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytrae greyish coppery with a red-green-blue metallic gloss. Head with densely coarse punctures. Clypeus coarsely punctate. Elytron length 2.0 mm, widened to about half of the way to the apex, its surface smooth and with short setae. Apex rounded, with 4 holes. Elytron strongly striate. Interstriae tubercle absent, 4-5-9 interstriae shallowly carinate, almost their entire length. Elytra black spots absent.

Male genitalia (fig. 4): Basal piece short. Parameres longer than median lobe.

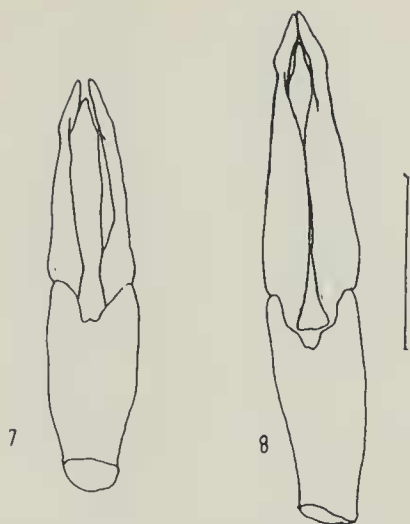
Etymology: This species is named after my brother-in-law Sakhawat PIROE.

***Hydrochus soekhnandanae* nov. spec.**

Type: Holotype male. Suriname Paramaribo 7.viii.1984 (MAKHAN). Paratypes: 15 specimens, same data as holotype.

Description: (Holotype, male) elongately oval, length 2.0 mm, width 0.8 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra green with a green-blue metallic gloss. Head with densely fine punctures. Elytron length 1.2 mm, widened at the middle, its surface smooth and with short setae, apex rounded. Elytron strongly striate, interstriae tubercle absent, black spots absent. Interstriae not carinate. Elytron apex with 3 holes.

Male genitalia (fig. 5): Basal piece little longer than parameres, median lobe short.



Figs 7-8: Male genitalia of (7) *Hydrochus vanbergehenegouweni* sp. nov. and (8) *H. beeneni* sp. nov. (scale line 0.25 mm).

Etymology: This species is named after my mother Soekhnandan.

***Hydrochus dewnaraini* nov. spec.**

Type: Holotype female. Suriname District Commewijne 5.viii.1984 (MAKHAN). **Paratypes:** 2 females, same data as holotype (male unknown).

Description: (Holotype, female) elongately oval, length 2.7 mm, width 1.1 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra black with a blue-green metallic gloss. Head with densely coarse punctures, medial part of frons swollen. Clypeus coarsely punctate. Pronotum with densely coarse punctures. Elytron length 1.7 mm, longer than wide, widest behind the middle, its surface smooth and with short setae. Elytron apex holes absent, black spot absent, apex rounded. Elytron strongly striate. Interstriae 3-5-7-9 carinate, almost their entire length. Elytron tubercle absent, black spots absent.

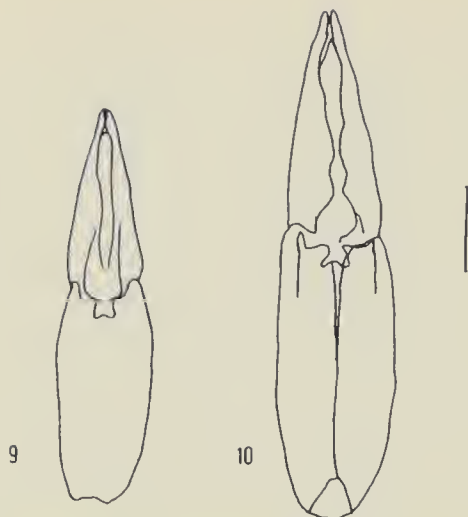
Etymology: This species is named after my brother Dewnarain MAKHAN.

Differential diagnosis: This species is the only one with swollen medial part of the frons.

***Hydrochus rattanae* nov. spec.**

Type: Holotype male. Suriname Paramaribo 7.viii.1984 (MAKHAN). **Paratypes:** 25 specimens, same data as holotype (some males and females are 2.3 mm long, most are of the same size as the holotype).

Description: (Holotype, male) elongate, length 2.5 mm, width 0.9 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra black with a green-blue metallic gloss. Head with densely fine punctures. Elytron length 1.6 mm, widened to about half of the way to the apex. Its surface smooth and with short setae, elytron strongly striate. 5 interstriae with a shallow tubercle, 6 punctures large, 9 interstriae shallowly carinate. Apex



Figs 9-10: Male genitalia of (9) *Hydrochus ducalis* KNISCH, 1921 and (10) *H. desenderi* sp. nov. (scale line 0.25 mm).

holes and black spots absent.

Male genitalia (fig. 6): Basal piece of same length as parameres, median lobe of same length as parameres.

Etymology: This species is named after my wife Rattan.

Differential diagnosis: This species seems to be allied to *H. argutus* KNISCH, 1921 from Brazil; *H. argutus* can be easily distinguished by the apex of the elytron having one large hole and three small holes.

***Hydrochus vanbergehenegouweni* nov. spec.**

Type: Holotype male. Venezuela Encontrados 17.vii.1930 (H.J. MACGILLAVRY). Paratypes: 2 specimens, same data as holotype.

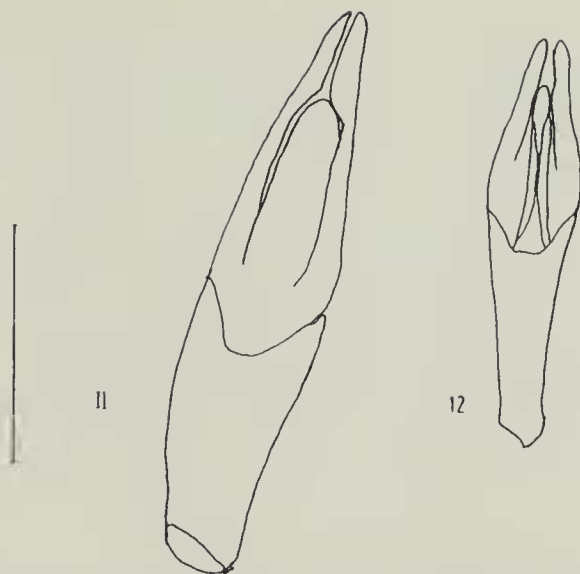
Description: (Holotype, male) elongate, length 2.7 mm, width 1.0 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra greyish coppery with a green-blue metallic gloss. Head with densely fine punctures. Elytron length 1.9 mm, widened about half of the way to the apex, its surface smooth and with short setae. Elytron strongly striate. Interstriae tubercle absent, interstriae not carinate. Apex with 4 holes.

Male genitalia (fig. 7): Basal piece little longer than parameres. Parameres longer than median lobe.

Etymology: This species is named after Arno VAN BERGE HENEGOUWEN.

***Hydrochus beeneni* nov. spec.**

Type: Holotype male. Cayman Brac. Spot Baye. St. 007 29.v.1972 (P. WAGENAAR HUMMELINCK). Paratypes: 17 specimens same data as holotype; 2 specimens Gran Brac. Spot Baye. St. 007. 29.v.1973 (P. WAGENAAR HUMMELINCK); 7 specimens Grand Cayman 1 km. E. of Red Bay. St. 981. 21.v.1973 (P. WAGENAAR HUMMELINCK); 7 specimens Grand Cayman. Pool. 21/2 km NE. Breakers. St. 982. 27.v.1973 (P. WAGENAAR HUMMELINCK).



Figs 11-12: Male genitalia of (11) *Hydrochus pupillus* D'ORCHYMONT, 1939 and (12) *H. coeneni* sp. nov. (scale line 0.25 mm).

Description: (Holotype, male) elongate, length 2.7 mm, width 1.0 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra green with a red-green-blue metallic gloss. Head with densely coarse punctures. Clypeus with coarse punctures. Elytron length 1.8 mm, widened to about half of the way to the apex, its surface smooth and with short setae. Elytron strongly striate. 4 interstriae with a shallow tubercle, 4 punctures large. Interstriae not carinate. Elytron apex holes absent.

Male genitalia (fig. 8): Basal piece short, parameres longer than median lobe.

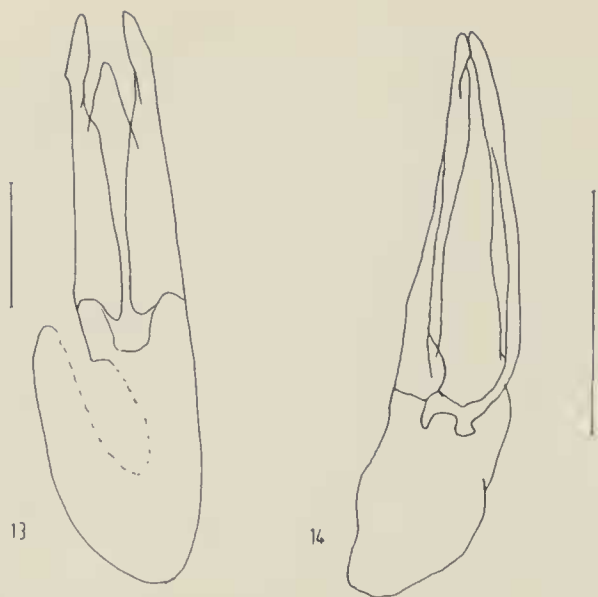
Etymology: This species is named after my friend Ron BEENEN.

***Hydrochus desenderi* nov. spec.**

Type: Holotype male. Brazil coll. R.I.Sc.N.B. 15.962 (P. ALEGRE) date unknown.

Description: (Holotype, male) elongate, length 5.2 mm, width 1.8 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra coppery with a green-blue metallic gloss. Head with densely fine punctures. Pronotum: disc with five large shallow depressions. Elytron length 1.8 mm, widened to about half of the way to the apex. Its surface smooth and with short setae. Elytron strongly striate. 4 and 5 interstriae ending with a shallow tubercle, 4 punctures large. 4 interstriae carinate in the middle. Apex holes absent.

Male genitalia (fig. 10): Basal piece large, parameres longer than median lobe.



Figs 13-14: Male genitalia of (13) *Hydrochus corruscans* BRUCH, 1915 and (14) *H. bruggei* sp. nov. (scale line 0.25 mm).

Etymology: This species is named after Konjev DESENDER (Brussels).

This species seems to be allied to *H. ducalis* KNISCH, 1921 from Brazil, but it can be distinguished by the small male genitalia (fig. 9), having the medial side of the parameres straight whereas in *desenderi* the male genitalia are larger and the medial part of the parameres are serrate. I have examined a specimen of *desenderi* determined by D'ORCHIMONT as *H. ducalis*.

***Hydrochus coeneni* nov. spec.**

Type: Holotype male. Brazil coll. R.I.Sc.N.B., date unknown. Paratype: 1 male.

Description: (Holotype, male) elongate, length 1.8 mm, width 0.7 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra black with a green-blue metallic gloss. Head with densely fine punctures. Elytron length 1.1 mm, widened to about half of the way to the apex. Its surface smooth and with short setae. Elytron strongly striate. Interstriae tubercle absent, interstriae not carinate. Elytron apex with 3 holes.

Male genitalia (fig. 12): Basal piece longer than parameres, parameres longer than median lobe.

Etymology: This species is named after Francis COENEN (Brussels).

Differential diagnosis: This species seems to be allied to *H. pupillus* D'ORCHIMONT, 1939 from Argentina; *H. pupillus* can be distinguished by the shape of the genitalia (fig. 11). I have examined 2 specimens of *coeneni* determined by HELLMAN (1975) as *pupillus*.

***Hydrochus bruggei* nov. spec.**

Type: Holotype male. Brazil. Corumba Matto Grosso R.H.N.B. 15962, date unknown.

Description: (Holotype, male) elongate, length 2.7 mm, width 1.7 mm. Dorsal side shining. Colour of head, pronotum, scutellum and elytra greyish coppery with a blue-green metallic gloss. Head with densely fine punctures. Elytron length 1.7 mm, widest to about half of the way to apex, its surface smooth and with short setae. Elytron strongly striate, tubercle absent, interstriae not carinate.

Male genitalia (fig. 14): Basal piece short, parameres longer than median lobe.

Etymology: This species is named after Ben BRUGGE (Amsterdam).

Differential diagnosis: This species seems to be allied to *H. corruscans* BRUCH, 1915 from Argentina; *H. corruscans* can be easily distinguished by the shape of the genitalia (fig. 13). I have examined a specimen of *bruggei* determined by D'ORCHIMONT as *H. corruscans*.

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